the country to push American cotton goods abroad. Since the system of selling agents is firmly established, and unlikely to be abolished or changed, what is needed is a corps of merchants who inquire into the needs of foreign markets, and undertake to supply them. The decline of our formerly moderate exports of cotton goods to Mexico is nothing less than a business scandal, for the value of that trade dropped from $264,728 in 1901 to $241,-943 in 1911.

If there is any unsatisfactory chapter in Dr. Copeland's work it is that on Dividends and Prices. He has made one more attempt—for many writers have undertaken the task before him—to arrive at an average rate of the profitableness of the cotton factories. The great trouble in ascertaining that fact is that the system of averages is not conclusive, nor indeed is it applicable, unless the whole of the statistics is available, as in this case it undoubtedly is not. Few of those who undertake the work seem to be aware that owing to the great fluctuations in the market for raw cotton, fluctuations that are due to speculation for the most part by men who never really buy and never really sell a bale of cotton, the question whether a mill is to be profitable in any given year depends to a large extent upon the accuracy or inaccuracy of the treasurer in his guess as to the future of the cotton market. But Dr. Copeland need not take it greatly to heart that he has not presented a convincing statement, when so many of his predecessors have also failed.

EDWARD STANWOOD.

Eisen und Alteisen in ihren technischen und wirtschaftlichen Beziehungen. By OSWALD GELLERT. (Leipzig: Duncker und Humblot. 1912. Pp. 78. 2.50 m.)

This pamphlet is a noteworthy study of the technical and economic significance of the large and increasing consumption of iron and steel in its relation to the use of old or scrap material. Iron and steel, unlike coal for example, belong to that class of economic goods whose consumption involves wear but not destruction. Scrap iron becomes a stock for the working over into new material. It is becoming an important factor in the determination of iron and steel prices, and its capability of competing with iron, newly derived from ore, increases with the resort of ores of diminishing iron content.

The writer treats his subject carefully and comprehensively,

and supports his main contentions with statistical data. The significance of the Siemens-Martin process of steel manufacture for the increasing use of scrap material is discussed. The capital necessary to this process is shown to be relatively small—a matter of some importance in connection with the growth of trusts and cartels. Some interesting observations are made regarding the significance of the use of scrap in countries consuming large quantities of iron and steel but having limited ore and coal deposits. Such countries have a large stock of scrap, and this material will in the future help to give them greater economic independence.

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NEW BOOKS

VON ALTROCK, W. *Beiträge zur Statistik der Milchwirtschaft der Industrie der Speisefettfabrikation.* (Berlin: Verlag des Deutschen Michwirtschaftlichen Vereins. 1912. Pp. iv, 172. 3.75 m.)

KNAGGS, H. V. *The truth about sugar.* (London: C. W. Daniel. 1913. 1s.)

MACFARLANE, J. J. *Manufacturing in Philadelphia, 1683-1912.* (Philadelphia: Commercial Museum. 1912. Pp. 101, illus. 50c.)

MORPURGO, G. *L'importanza economica della sintesi chimica.* (Triest: La Scuola di Fondazione Revoltella. 1912.)

Deals in an elementary and interesting fashion with the history of chemical synthesis and the nature, variety, and economic importance of synthetic products. The recent annual production of artificial indigo in Germany is given as equivalent to what could be produced on 150,000 acres of land.

WALTON, P. *The story of textiles; a bird's-eye view of the history of the beginning and the growth of the industry by which mankind is clothed.* (Boston: John S. Lawrence. 1912. Pp. 274, illus.)

WOOD, T. B. *The story of a loaf of bread.* Cambridge manuals of science and literature. (New York: Putnam. 1913.)

———— *An encyclopaedia of industrialism.* (London: Nelson. 1913. Pp. 543. 1s.)

Transportation and Communication

Freight Classification. A Study of Underlying Principles. By J. F. STROMBECK. Hart Schaffner & Marx Prize Essays, XII. (Boston: Houghton Mifflin Company. 1912. Pp. 131. $1.00.)

Mr. Strombeck has written a lucid, interesting and instructive book, which will be valuable as a text in railroad courses in the